If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A

#### C-A OPERATIONS PROCEDURES MANUAL

#### **ATTACHMENT**

#### 4.120.10.h 10 O'Clock (PEER 15) ODH Tests

C-A-OP	M Procedures in v	which this Attachmen	t is used.
4.120.10			
	Hand Proce	essed Changes	
HPC No.	<u>Date</u>	Page Nos.	<u>Initials</u>
		Signatu er-Accelerator Depar	

V. Castillo

## 4.120.10.h 10 O'Clock (PEER 15) ODH Tests

## PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title:	Checksum:	
Division B Software Filename and Checksum: Title:	Checksum:	
Initial testing complete:		
Test Team Leader's Name (Print):	Life Number:	
Test Team Leader's Name (Sign):	Date://	
Acceptance test procedure complete (following repairs and retesting if required):		
Test Team Leader's Name (Print):	I ifa Numbar:	
Test Team Leader 8 Name (Timt).	Life Number.	
Test Team Leader's Name (Sign):	Date://	
Test results reviewed by:		
Safety Section Head's Name (Print):	Life Number:	
	<b>D</b>	
Safety Section Head's Name (Sign):	Date://	
Test results accepted by Radiation Safety Committee:		
RSC Member's Name (Print):	Life Number:	
RSC Member's Name (Sign):	Date://	

# 1.1 Conduct a visual check on Peer 17 Crash and Crash/ODH boxes following Table 1 below $\sqrt{\ }=$ ok, x= problem

BOXES		Verify	Verify			I boxes only		Verify all
		verny mechan	elec.	Divis	ion A	Divis	ion B	verny an X's
CRASH	Crash/ODH	condn. ok	condn. ok	Lcd Rdg	Tp2 – Tp4 Vltg	Lcd Rdg	Tp2 – Tp4 Vltg	corrected
9CB1				N/A	N/A	N/A	N/A	
9CB2				N/A	N/A	N/A	N/A	
	9CB3			%	V	%	V	
9CB4				N/A	N/A	N/A	N/A	
	9CB5			%	V	%	V	
10CB1				N/A	N/A	N/A	N/A	
	10CB2			%	V	%	V	
	10CB3			%	V	%	V	
10CB4				N/A	N/A	N/A	N/A	
	10CB5			%	V	%	V	
	10XCB1			%	V	%	V	
	10XCB2			%	V	%	V	
	10XCB3			%	V	%	V	

Table 1 – Summary of visual check on Crash and Crash/ODH boxes in Peer 15

## 1.2 Verification of valid calibration of ODH sensors in Peer 17, following Table 2 below $\sqrt{=}$ ok, x =problem

ODH sensor	Verify valid calibration	Record calibration date	Verify all x's corrected	Record new calibration date
9AS1				
9AS2		/		
10AS1				
10AS2				
10AS3				
10XAS1				
10XAS2				
10XAS3				

Table 2 – Verification of valid calibration of ODH sensors in Peer 15

#### 1.3 Test of ODH sensor 9AS1 in 9CB3

PLACE	Peer 17 in Mode 8	
VERIFY	Peer 17 is in Restricted Access	MODE 8
FLOW	Helium ( or Nitrogen ) gas across 9AS1	
RECORD	Oxygen trip level for Div A	%
RECORD	Oxygen trip level for Div B	%
VERIFY	MCR sees 9AS1 Div A	TRIPPED
VERIFY	MCR sees 9AS1 Div B	TRIPPED
VERIFY	Div A & B strobes on 9CB3 are	FLASHING
VERIFY	Div A & B sonalerts on 9CB3 are	SOUNDING
VERIFY	Fan <b>9EF2</b> is	ON
VERIFY	Vent <b>9AV1</b> is	OPEN
VERIFY	Vent 9AV2 is	OPEN
HALT	Flow of gas on 9AS1	
WAIT	For <b>9AS1</b> to clear (level ~ trip-level above)	
VERIFY	Div A & B strobes and sonalerts on 9CB3 are	OFF
VERIFY	Fan <b>9EF2</b> is	OFF
VERIFY	Vent <b>9AV1</b> is	CLOSED
VERIFY	Vent 9AV2 is	CLOSED
RESET	ODH in MCR	
VERIFY	MCR sees ODH as	RESET

Check for Test Acceptance of sensor 9AS1

## 1.4 Test of ODH sensor 9AS2 in 9CB5

		PLACE	Peer 17 in Mode 8	
		VERIFY	Peer 17 is in Restricted Access	MODE 8
		EL OW	Halima (an Nituagan) and agus 04.52	
		FLOW RECORD	Helium ( or Nitrogen ) gas across 9AS2 Oxygen trip level for Div A	%
		RECORD	Oxygen trip level for Div B	
		VERIFY	MCR sees 9AS2 Div A	TRIPPED 70
		VERIFY	MCR sees 9AS2 Div B	TRIPPED
		VERIFY	Div A & B strobes on 9CB5 are	FLASHING
		VERIFY	Div A & B sonalerts on 9CB5 are	SOUNDING
		VERIFY	Fan <b>9EF2</b> is	ON
		VERIFY	Vent <b>9AV1</b> is	OPEN
		VERIFY	Vent 9AV4 is	OPEN
		HALT	Flow of gas on 9AS2	
		WAIT	For <b>9AS2</b> to clear (level ~ trip-level above)	
		VERIFY	Div A & B strobes and sonalerts on 9CB5 are	OFF
		VERIFY	Fan <b>9EF2</b> is	OFF
		VERIFY	Vent <b>9AV1</b> is	CLOSED
		VERIFY	Vent <b>9AV4</b> is	CLOSED
		RESET	ODH in MCR	
		VERIFY	MCR sees ODH as	RESET
		Check fo	or Test Acceptance of sensor 9AS2	
1.5	7	Test of ODH	sensor 10XAS1 in 10XCB1	
		PLACE	Peer 17 in Mode 8	
	П	VERIFY	Peer 17 is in Restricted Access	MODE 8
	_			
		FLOW	Helium ( or Nitrogen ) gas across 10XAS1	
		RECORD	Oxygen trip level for Div A	%
		RECORD	Oxygen trip level for Div B	%
		VERIFY	MCR sees 10XAS1 Div A	TRIPPED
		VERIFY	MCR sees 10XAS1 Div B	TRIPPED
		VERIFY	Div A & B strobes on 10XCB1 are	FLASHING
		VERIFY	Div A & B sonalerts on 10XCB1 are	SOUNDING
		VERIFY	Fan 10XEF1 is	ON
		VERIFY	Fan 10XEF2 is	ON
		VERIFY	Fan 10XSF1 is	ON
		VERIFY	Fan 10XSF2 is	ON
		HALT	Flow of gas on 10XAS1	
		WAIT	For <b>10XAS1</b> to clear (level ~ trip-level above)	

	□ <b>V</b>	ERIFY	Div A & B strobes and sonalerts on 10XCB1 are	OFF
		ERIFY	Fan 10XEF1 is	OFF
		ERIFY	Fan 10XEF2 is	OFF
		ERIFY	Fan <b>10XSF1</b> is	OFF
	□ <b>V</b>	ERIFY	Fan <b>10XSF2</b> is	
	R	RESET	ODH in MCR	
		ERIFY	MCR sees ODH as	RESET
		Check for	Test Acceptance of sensor 10XAS1	
1.6	Te	st of ODH s	sensor 10XAS2 in 10XCB2	
	P	LACE	Peer 17 in Mode 8	
		ERIFY	Peer 17 is in Restricted Access	MODE 8
	F	LOW	Helium ( or Nitrogen ) gas across 10XAS2	
		RECORD	Oxygen trip level for Div A	%
		RECORD	Oxygen trip level for Div B	
		ERIFY	MCR sees 10XAS2 Div A	TRIPPED
		ERIFY	MCR sees 10XAS2 Div B	TRIPPED
	_	ERIFY	Div A & B strobes on 10XCB2 are	FLASHING
		ERIFY	Div A & B sonalerts on 10XCB2 are	SOUNDING
		ERIFY	Fan 10XEF1 is	ON
	_	ERIFY	Fan <b>10XEF2</b> is	ON
	_	ERIFY	Fan 10XSF1 is	ON
		ERIFY	Fan 10XSF2 is	ON
	H	IALT	Flow of gas on 10XAS2	
	V	VAIT	For <b>10XAS2</b> to clear (level ~ trip-level above)	
	□ <b>V</b>	ERIFY	Div A & B strobes and sonalerts on 10XCB2 are	OFF
		ERIFY	Fan <b>10XEF1</b> is	OFF
	_	ERIFY	Fan <b>10XEF2</b> is	OFF
		ERIFY	Fan <b>10XSF1</b> is	OFF
		ERIFY	Fan 10XSF2 is	
		RESET	ODH in MCR	~
		ERIFY	MCR sees ODH as	RESET

Check for Test Acceptance of sensor 10XAS2

## 1.7 Test of ODH sensor 10AS1 in 10CB2

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
VEXIF 1	Teti 17 is in Restricted Access	MODE
FLOW	Helium ( or Nitrogen ) gas across 10AS1	
RECORD	Oxygen trip level for Div A	%
RECORD	Oxygen trip level for Div B	%
VERIFY	MCR sees 10AS1 Div A	TRIPPED
VERIFY	MCR sees 10AS1 Div B	TRIPPED
VERIFY	Div A & B strobes on 10CB2 are	FLASHING
VERIFY	Div A & B sonalerts on 10CB2 are	SOUNDING
VERIFY	Fan <b>10EF1</b> is	ON
VERIFY	Vent 10AV1 is	OPEN
VERIFY	Vent 10AV2 is	OPEN
HALT	Flow of gas on 10AS1	
WAIT	For <b>10AS1</b> to clear (level ~ trip-level above)	
VERIFY	Div A & B strobes and sonalerts on 10CB2 are	OFF
VERIFY	Fan <b>10EF1</b> is	OFF
VERIFY	Vent 10AV1 is	CLOSED
VERIFY	Vent 10AV2 is	CLOSED
RESET	ODH in MCR	
VERIFY	MCR sees ODH as	RESET
	r Test Acceptance of sensor 10AS1 sensor 10AS2 in 10CB3	
DIACE	Peer 17 in Mode 8	
PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
FLOW	Helium ( or Nitrogen ) gas across 10AS2	
RECORD	Oxygen trip level for Div A	%
RECORD	Oxygen trip level for Div B	
VERIFY	MCR sees 10AS2 Div A	TRIPPED
VERIFY	MCR sees 10AS2 Div B	TRIPPED
VERIFY	Div A & B strobes on 10CB3 are	FLASHING
VERIFY	Div A & B sonalerts on 10CB3 are	SOUNDING
VERIFY	Fan <b>10EF1</b> is	ON
VERIFY	Vent <b>10AV2</b> is	OPEN
VERIFY	Vent 10AV4 is	OPEN
HALT	Flow of gas on 10AS2	
WAIT	For <b>10AS2</b> to clear (level ~ trip-level above)	
	•	

1.8

	□ VERIFY	Div A & B strobes and sonalerts on 10CB3 are	OFF
	□ VERIFY	Fan <b>10EF1</b> is	OFF
	□ VERIFY	Vent 10AV2 is	CLOSED
	□ <b>VERIFY</b>	Vent 10AV4 is	CLOSED
	RESET	ODH in MCR	
	□ VERIFY	MCR sees ODH as	RESET
	□ Check	for Test Acceptance of sensor 10AS2	
1.9	Test of OD	H sensor 10AS3 in 10CB5	
	PLACE	Peer 17 in Mode 8	
	□ <b>VERIFY</b>	Peer 17 is in Restricted Access	MODE 8
	FLOW	Helium ( or Nitrogen ) gas across 10AS3	
	RECORD		%
	RECORD		
	□ VERIFY	MCR sees 10AS3 Div A	TRIPPED
	$\Box$ <b>VERIFY</b>	MCR sees 10AS3 Div B	TRIPPED
	$\Box$ <b>VERIFY</b>	Div A & B strobes on 10CB5 are	FLASHING
	$\Box$ <b>VERIFY</b>	Div A & B sonalerts on 10CB5 are	SOUNDING
	$\Box$ <b>VERIFY</b>	Fan <b>11EF1</b> is	ON
	$\Box$ <b>VERIFY</b>	Vent 10AV4 is	OPEN
	□ VERIFY	Vent 11AV1 is	OPEN
	HALT	Flow of gas on 10AS3	
	WAIT	For <b>10AS3</b> to clear (level ~ trip-level above)	
	□ VERIFY	Div A & B strobes and sonalerts on 10CB5 are	OFF
	□ VERIFY	Fan <b>11EF1</b> is	OFF
	$\Box$ <b>VERIFY</b>	Vent 10AV4 is	CLOSED
	□ <b>VERIFY</b>	Vent 11AV1 is	CLOSED
	RESET	ODH in MCR	
	□ VERIFY	MCR sees ODH as	RESET

Check for Test Acceptance of sensor 10AS3

#### 1.10 10-minute Activation test of sensor 9AS1 in sector 9

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
JUMPER JUMPER	Tp2 and Tp4 on the Div A pcb in 9CB3 Tp2 and Tp4 on the Div B pcb in 9CB3	
VERIFY VERIFY VERIFY VERIFY VERIFY	MCR sees Peer 17 is in MCR sees 9AS1 Div A MCR sees 9AS1 Div B Fan 9EF2 is immediately Vent 9AV1 is immediately Vent 9AV2 is immediately	MODE 2 TRIPPED TRIPPED ON OPEN OPEN
AFTER	~ 30 secs	
TURN VERIFY TURN VERIFY	Bypass Switch to Bypass  Strobes □, Sonalerts □ and Fans (after ~90secs) □  Bypass Switch from Bypass  Strobes □, Sonalerts □ and Fans (after ~30secs) □	STOP CONTINUE
BEGIN	10-minute timer	
RECORD	Volume of air-flow at the inlet of fan 9EF2	LFM
VERIFY VERIFY	Target flow value ( $\pm 10\%$ ) Air flow at tell-tale of vent <b>9AV1</b> is Air flow at tell-tale of vent <b>9AV2</b> is	1592 LFM ADEQUATE ADEQUATE
AFTER RECORD	~ 10 minutes Duration of timer	mins
VERIFY	Fan 8EF0 is Fan 8EF1 is Fan 9EF1 is Fan 10XEF1 is Fan 10XEF2 is Fan 10XSF1 is Fan 10XSF2 is Vent 8AV0 is Vent 8AV1 is Vent 8AV2 is Vent 8AV3 is Vent 8AV4 is Vent 9AV4 is Jumper between Tp2 and Tp4 on the Div A pcb in 9CB3 Jumper between Tp2 and Tp4 on the Div B pcb in 9CB3	ON ON ON ON ON ON ON ON OPEN OPEN OPEN O
VERIFY VERIFY VERIFY	Fan 9EF2 is Vent 9AV1 is Vent 9AV2 is	OFF CLOSED CLOSED

		VERIFY	Fan <b>8EF0</b> is	OFF
		VERIFY	Fan <b>8EF1</b> is	OFF
		VERIFY	Fan <b>9EF1</b> is	OFF
		VERIFY	Fan 10XEF1 is	OFF
		VERIFY	Fan <b>10XEF2</b> is	OFF
		VERIFY	Fan <b>10XSF1</b> is	OFF
		VERIFY	Fan <b>10XSF2</b> is	OFF
		VERIFY	Vent 8AV0 is	CLOSED
		VERIFY	Vent 8AV1 is	CLOSED
		VERIFY	Vent 8AV2 is	CLOSED
		VERIFY	Vent 8AV3 is	CLOSED
		VERIFY	Vent 8AV4 is	CLOSED
		VERIFY	Vent 9AV3 is	CLOSED
		VERIFY	Vent <b>9AV4</b> is	CLOSED
		RESET	ODH in MCR	
	П	VERIFY	MCR sees ODH as	RESET
	_			
		Check for	r Test Acceptance of sensor 9AS1 on for > 10 minutes	
1.11		Test Activation	on of multiple sensors 9AS1 and 9AS2 in sector 9	
		PLACE	Peer 17 in Mode 8	
		VERIFY	Peer 17 is in Restricted Access	MODE 8
		JUMPER	Tp2 and Tp4 on the Div A pcb in 9CB3	
		JUMPER	Tp2 and Tp4 on the Div B pcb in 9CB3	
		JUMPER	Tp2 and Tp4 on the Div A pcb in 9CB5	
		<b>JUMPER</b>	Tp2 and Tp4 on the Div B pcb in 9CB5	
		VERIFY	MCR sees Peer 17 is in	MODE 2
		VERIFY	MCR sees 9AS1 Div A	TRIPPED
		VERIFY	MCR sees 9AS1 Div B	TRIPPED
		VERIFY	MCR sees 9AS2 Div A	TRIPPED
		VERIFY	MCR sees 9AS2 Div B	TRIPPED
		VEDIEV	For SEEO is	ON
		VERIFY VERIFY	Fan <b>8EF0</b> is Fan <b>8EF1</b> is	ON ON
			Fan <b>9EF1</b> is	ON ON
		VERIFY VERIFY	Fan 9EF2 is	ON ON
		VERIFY	Fan 10XEF1 is	ON ON
		VERIFY	Fan 10XEF2 is	ON ON
		VERIFY	Fan 10XSF1 is	ON ON
		VERIFY	Fan 10XSF2 is	ON ON
		VERIFY	Vent 8AV0 is	OPEN
		VERIFY	Vent 8AV1 is	OPEN
		VERIFY	Vent 8AV2 is	OPEN
		VERIFY	Vent 8AV3 is	OPEN
		VERIFY	Vent 8AV4 is	OPEN
		· · •		2 4 ,

VERIFY	Vent <b>9AV1</b> is	OPEN
VERIFY	Vent 9AV2 is	OPEN
VERIFY	Vent 9AV3 is	OPEN
<b>VERIFY</b>	Vent <b>9AV4</b> is	OPEN
AFTER	~ 30 secs	
TURN	Bypass Switch to Bypass	
VERIFY	Strobes $\square$ , Sonalerts $\square$ and Fans (after ~90secs) $\square$	STOP
TURN	Bypass Switch from Bypass	
VERIFY	<b>Strobes</b> $\square$ , <b>Sonalerts</b> $\square$ and <b>Fans</b> (after ~30secs) $\square$	CONTINUE
REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 9CB3	
REMOVE	Jumper between Tp2 and Tp4 on the Div B pcb in 9CB3	
REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 9CB5	
REMOVE	Jumper between Tp2 and Tp4 on the Div B pcb in 9CB5	
VERIFY	Fan <b>8EF0</b> is	OFF
VERIFY	Fan <b>8EF1</b> is	OFF
VERIFY	Fan <b>9EF1</b> is	OFF
VERIFY	Fan <b>9EF2</b> is	OFF
VERIFY	Fan <b>10XEF1</b> is	OFF
VERIFY	Fan <b>10XEF2</b> is	OFF
VERIFY	Fan <b>10XSF1</b> is	CLOSED
VERIFY	Fan <b>10XSF2</b> is	CLOSED
VERIFY	Vent <b>8AV0</b> is	CLOSED
VERIFY	Vent <b>8AV1</b> is	CLOSED
VERIFY	Vent 8AV2 is	CLOSED
VERIFY	Vent <b>8AV3</b> is	CLOSED
VERIFY	Vent <b>8AV4</b> is	CLOSED
VERIFY	Vent <b>9AV1</b> is	CLOSED
VERIFY	Vent <b>9AV2</b> is	CLOSED
VERIFY	Vent <b>9AV3</b> is	CLOSED
VERIFY	Vent <b>9AV4</b> is	CLOSED
RESET	ODH in MCR	
VERIFY	MCR sees ODH as	RESET

<sup>☐</sup> Check for Test Acceptance of Activation of multiple sensors 9AS1 and 9AS2 in sector 7

## 1.12 10-minute Activation test of sensor 10XAS1 in sector 10 Experimental area

	PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
_	JUMPER JUMPER	Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1	
	VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B Fan 10XEF1 is immediately Fan 10XEF2 is immediately Fan 10XSF1 is immediately Fan 10XSF2 is immediately	MODE 2 TRIPPED TRIPPED ON ON ON ON
	AFTER	~ 30 secs	
	TURN VERIFY TURN VERIFY	Bypass Switch to Bypass  Strobes □, Sonalerts □ and Fans (after ~90secs) □  Bypass Switch from Bypass  Strobes □, Sonalerts □ and Fans (after ~30secs) □	STOP CONTINUE
	BEGIN	10-minute timer	
	RECORD	Volume of air-flow at the inlet of fan 10XEF1	LFM
	RECORD	Target flow value ( $\pm 10\%$ ) <b>Volume of air-flow</b> at the inlet of fan <b>10XEF2</b>	<u>1488 LFM</u> <b>LFM</b>
	RECORD	Target flow value ( $\pm 10\%$ ) <b>Volume of air-flow</b> at the inlet of fan <b>10XSF1</b>	<u>1488 LFM</u> <b>LFM</b>
	RECORD	Target flow value ( $\pm 10\%$ ) <b>Volume of air-flow</b> at the inlet of fan <b>10XSF2</b> Target flow value ( $\pm 10\%$ )	1416 LFM LFM 1416 LFM
	AFTER RECORD	~ 10 minutes Duration of timer	mins
	VERIFY VERIFY	Fan <b>8EF0</b> is Fan <b>8EF1</b> is	ON ON
	VERIFY VERIFY	Fan <b>9EF1</b> is	ON ON
	VERIFY	Fan <b>9EF2</b> is	ON
	VERIFY	Vent 8AV0 is	OPEN
	VERIFY	Vent 8AV1 is	OPEN
	VERIFY	Vent <b>8AV2</b> is	OPEN
	VERIFY	Vent 8AV3 is	OPEN
	VERIFY	Vent <b>8AV4</b> is	OPEN
	VERIFY	Vent 9AV1 is	OPEN
	VERIFY	Vent 9AV2 is	OPEN
	VERIFY	Vent 9AV4 is	OPEN
	VERIFY	Vent <b>9AV4</b> is	OPEN

	REMOVE REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1	
	VERIFY	Fan <b>10XEF1</b> is	OFF
	VERIFY	Fan <b>10XEF2</b> is	OFF
	VERIFY	Fan <b>10XSF1</b> is	OFF
	VERIFY	Fan 10XSF2 is	OFF
	VERIFY	Fan <b>8EF0</b> is	OFF
	VERIFY	Fan <b>8EF1</b> is	OFF
	<b>VERIFY</b>	Fan <b>9EF1</b> is	OFF
	VERIFY	Fan <b>9EF2</b> is	OFF
	<b>VERIFY</b>	Vent 8AV0 is	CLOSED
	VERIFY	Vent <b>8AV1</b> is	CLOSED
	VERIFY	Vent 8AV2 is	CLOSED
	VERIFY	Vent 8AV3 is	CLOSED
	VERIFY	Vent 8AV4 is	CLOSED
	VERIFY	Vent <b>9AV1</b> is	CLOSED
	VERIFY	Vent <b>9AV2</b> is	CLOSED
	VERIFY	Vent 9AV3 is	CLOSED
	VERIFY	Vent <b>9AV4</b> is	CLOSED
	RESET	ODH in MCR	
	VERIFY	MCR sees ODH as	RESET
	Check to	or Test Acceptance of sensor 10XAS1 on for > 10 minutes	
L		on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments	al area
L			al area
	Test Activati	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experimenta	al area MODE 8
	Test Activati	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8	
	Test Activati PLACE VERIFY JUMPER JUMPER JUMPER JUMPER	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB1	
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER JUMPER	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2	MODE 8
	Test Activati PLACE VERIFY JUMPER JUMPER JUMPER JUMPER JUMPER VERIFY	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in	MODE 8  MODE 2
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in MCR sees 10XAS1 Div A	MODE 8  MODE 2 TRIPPED
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B	MODE 8  MODE 2 TRIPPED TRIPPED
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY VERIFY	on of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experiments  Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B MCR sees 10XAS2 Div A	MODE 8  MODE 2  TRIPPED  TRIPPED  TRIPPED
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS2 Div A MCR sees 10XAS2 Div B	MODE 2 TRIPPED TRIPPED TRIPPED TRIPPED
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS2 Div A MCR sees 10XAS2 Div B Fan 8EF0 is	MODE 2 TRIPPED TRIPPED TRIPPED TRIPPED ON
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B MCR sees 10XAS2 Div B  Fan 8EF0 is Fan 8EF1 is	MODE 8  MODE 2 TRIPPED TRIPPED TRIPPED ON ON ON
	Test Activation PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B MCR sees 10XAS2 Div B  Fan 8EF0 is Fan 8EF1 is Fan 9EF1 is	MODE 2 TRIPPED TRIPPED TRIPPED ON ON
	Test Activati PLACE VERIFY  JUMPER JUMPER JUMPER JUMPER VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access  Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div B pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB1 Tp2 and Tp4 on the Div A pcb in 10XCB2 Tp2 and Tp4 on the Div B pcb in 10XCB2  MCR sees Peer 17 is in MCR sees 10XAS1 Div A MCR sees 10XAS1 Div B MCR sees 10XAS2 Div B  Fan 8EF0 is Fan 8EF1 is Fan 9EF1 is Fan 9EF2 is	MODE 8  MODE 2 TRIPPED TRIPPED TRIPPED ON ON ON

1.13

URRIFY Vent 8AV1 is OPEN VERIFY Vent 8AV2 is OPEN VERIFY Vent 8AV3 is OPEN VERIFY Vent 8AV4 is OPEN VERIFY Vent 9AV1 is OPEN VERIFY Vent 9AV2 is OPEN VERIFY Vent 9AV2 is OPEN VERIFY Vent 9AV4 is OPEN VERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP TURN Bypass Switch from Bypass VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE JUMPER SET JUMP	ON ON OPEN	VERIFY Fan 10XSF2 is	
URRIFY Vent 8AV3 is OPEN UVERIFY Vent 8AV4 is OPEN UVERIFY Vent 9AV1 is OPEN UVERIFY Vent 9AV2 is OPEN UVERIFY Vent 9AV3 is OPEN UVERIFY Vent 9AV4 is OPEN AFTER ~30 secs  TURN Bypass Switch to Bypass UVERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP TURN Bypass Switch from Bypass UVERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  UVERIFY Fan 8EF0 is OFF UVERIFY Fan 8EF1 is OFF UVERIFY Fan 9EF1 is OFF UVERIFY Fan 9EF1 is OFF UVERIFY Fan 10XEF1 is OFF UVERIFY Fan 10XEF1 is OFF UVERIFY Fan 10XEF1 is OFF UVERIFY Fan 10XEF2 is CLOSE UVERIFY Vent 8AV0 is CLOSE UVERIFY Vent 8AV1 is CLOSE UVERIFY Vent 8AV2 is CLOSE UVERIFY Vent 8AV2 is CLOSE UVERIFY Vent 8AV4 is CLOSE UVERIFY Vent 9AV1 is CLOSE UVERIFY Vent 9AV1 is CLOSE UVERIFY Vent 9AV1 is CLOSE			
□ VERIFY Vent 8AV4 is OPEN   □ VERIFY Vent 9AV1 is OPEN   □ VERIFY Vent 9AV3 is OPEN   □ VERIFY Vent 9AV4 is OPEN   □ VERIFY Vent 9AV4 is OPEN   □ AFTER ~ 30 secs   TURN Bypass Switch to Bypass □ STOP   TURN Bypass Switch from Bypass □ STOP   TURN Bypass Switch from Bypass □ CONTI   □ VERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ CONTI   REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2   □ VERIFY Fan 8EF0 is OFF   □ VERIFY Fan 8EF1 is OFF   □ VERIFY Fan 9EF1 is OFF   □ VERIFY Fan 9EF1 is OFF   □ VERIFY Fan 10XEF2 is OFF   □ VERIFY Fan 10XSF1 is CLOSE   □ VERIFY Vent 10XSF1 is CLOSE   □ VERIFY Vent 8AV1 is CLOSE   □ VERIFY Vent 8AV2 is CLOSE   □ VERIFY Vent 8AV3 is CLOSE   □ VERIFY Vent 8AV4 is CLOSE   □ VERIFY Vent 8AV4 is CLOSE   □ VERIFY Vent 8AV4 is CLOSE   □ VERIFY Vent 9AV2 is CLOSE	OPEN		
URRIFY Vent 9AV1 is OPEN URRIFY Vent 9AV2 is OPEN URRIFY Vent 9AV3 is OPEN URRIFY Vent 9AV4 is OPEN  AFTER ~30 secs  TURN Bypass Switch to Bypass URRIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP TURN Bypass Switch from Bypass URRIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  URRIFY Fan 8EF0 is OFF URRIFY Fan 8EF1 is OFF URRIFY Fan 9EF1 is OFF URRIFY Fan 9EF2 is OFF URRIFY Fan 10XEF1 is OFF URRIFY Fan 10XEF1 is OFF URRIFY Fan 10XEF2 is CLOSE URRIFY Vent 8AV0 is CLOSE URRIFY Vent 8AV1 is CLOSE URRIFY Vent 8AV3 is CLOSE URRIFY Vent 8AV4 is CLOSE URRIFY Vent 8AV4 is CLOSE URRIFY Vent 9AV1 is CLOSE URRIFY Vent 9AV2 is CLOSE URRIFY Vent 9AV2 is CLOSE	OPEN	☐ VERIFY Vent 8AV3 is	
□ VERIFY Vent 9AV3 is OPEN   □ VERIFY Vent 9AV4 is OPEN   □ VERIFY Vent 9AV4 is OPEN   AFTER ~ 30 secs   TURN Bypass Switch to Bypass STOP   □ VERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP   TURN Bypass Switch from Bypass CONTI   □ VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI   REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2   □ VERIFY Fan 8EF0 is OFF   □ VERIFY Fan 8EF0 is OFF   □ VERIFY Fan 8EF1 is OFF   □ VERIFY Fan 9EF1 is OFF   □ VERIFY Fan 10XEF1 is OFF   □ VERIFY Fan 10XEF1 is OFF   □ VERIFY Fan 10XEF2 is OFF   □ VERIFY Fan 10XSF1 is CLOSE   □ VERIFY Vent 8AV0 is CLOSE   □ VERIFY Vent 8AV1 is CLOSE   □ VERIFY Vent 8AV2 is CLOSE   □ VERIFY Vent 8AV4 is CLOSE   □ VERIFY Vent 9AV1 is CLOSE   □ VERIFY Vent 9AV2 is CLOSE	<b>OPEN</b>	<b>VERIFY</b> Vent <b>8AV4</b> is	
URRIFY Vent 9AV4 is OPEN  AFTER ~ 30 secs  TURN Bypass Switch to Bypass UVERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP  TURN Bypass Switch from Bypass UVERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  UVERIFY Fan 8EF0 is OFF  VERIFY Fan 8EF1 is OFF  VERIFY Fan 9EF1 is OFF  VERIFY Fan 10XEF1 is OFF  VERIFY Fan 10XEF1 is OFF  VERIFY Fan 10XEF2 is OFF  VERIFY Fan 10XEF2 is CLOSE  VERIFY Vent 8AV0 is CLOSE  VERIFY Vent 8AV3 is CLOSE  VERIFY Vent 8AV4 is CLOSE  VERIFY Vent 8AV4 is CLOSE  VERIFY Vent 9AV2 is CLOSE  VERIFY Vent 9AV2 is CLOSE  VERIFY Vent 9AV1 is CLOSE  VERIFY Vent 9AV2 is CLOSE  VERIFY Vent 9AV2 is CLOSE	OPEN	<b>VERIFY</b> Vent <b>9AV1</b> is	
□ VERIFY Vent 9AV4 is  AFTER ~30 secs  TURN Bypass Switch to Bypass □ VERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP TURN Bypass Switch from Bypass □ VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  □ VERIFY Fan 8EF0 is □ VERIFY Fan 8EF1 is □ VERIFY Fan 9EF1 is □ VERIFY Fan 9EF1 is □ VERIFY Fan 10XEF2 is □ VERIFY Vent 8AV0 is □ VERIFY Vent 8AV1 is □ VERIFY Vent 8AV3 is □ VERIFY Vent 8AV4 is □ VERIFY Vent 8AV4 is □ VERIFY Vent 9AV1 is □ VERIFY Vent 9AV1 is □ VERIFY Vent 9AV1 is □ VERIFY Vent 9AV2 is	OPEN	=	
AFTER ~30 secs  TURN Bypass Switch to Bypass  VERIFY Strobes □, Sonalerts □ and Fans (after ~90 secs) □ STOP  TURN Bypass Switch from Bypass  VERIFY Strobes □, Sonalerts □ and Fans (after ~30 secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10 XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10 XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10 XCB2  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10 XCB2  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10 XCB2  □ VERIFY Fan 8EF0 is  □ VERIFY Fan 8EF1 is  □ VERIFY Fan 9EF1 is  □ VERIFY Fan 10 XEF1 is  □ VERIFY Fan 10 XEF1 is  □ VERIFY Fan 10 XEF1 is  □ VERIFY Fan 10 XEF2 is  □ VERIFY Fan 10 XEF2 is  □ VERIFY Vent 8AV0 is  □ VERIFY Vent 8AV1 is  □ VERIFY Vent 8AV2 is  □ VERIFY Vent 8AV3 is  □ VERIFY Vent 8AV4 is  □ VERIFY Vent 8AV4 is  □ VERIFY Vent 9AV1 is  □ VERIFY Vent 9AV1 is  □ VERIFY Vent 9AV1 is  □ VERIFY Vent 9AV2 is  □ VERIFY Vent 9AV2 is  □ VERIFY Vent 9AV1 is  □ VERIFY Vent 9AV2 is	OPEN	<b>VERIFY</b> Vent <b>9AV3</b> is	
TURN Bypass Switch to Bypass  VERIFY Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP  TURN Bypass Switch from Bypass  VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2  VERIFY Fan 8EF0 is  VERIFY Fan 8EF1 is  VERIFY Fan 9EF1 is  VERIFY Fan 9EF1 is  VERIFY Fan 10XEF1 is  VERIFY Fan 10XEF1 is  VERIFY Fan 10XEF2 is  VERIFY Fan 10XSF1 is  VERIFY Fan 10XSF2 is  VERIFY Vent 8AV0 is  VERIFY Vent 8AV1 is  VERIFY Vent 8AV2 is  VERIFY Vent 8AV4 is  VERIFY Vent 8AV4 is  CLOSE  VERIFY Vent 9AV1 is  CLOSE  VERIFY Vent 9AV1 is  CLOSE  VERIFY Vent 9AV1 is  CLOSE  VERIFY Vent 9AV2 is  CLOSE	OPEN	J VERIFY Vent 9AV4 is	
□ VERIFY TURN Strobes □, Sonalerts □ and Fans (after ~90secs) □ STOP   TURN Bypass Switch from Bypass CONTI   □ VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI   REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2   □ VERIFY Fan 8EF0 is OFF   □ VERIFY Fan 8EF1 is OFF   □ VERIFY Fan 9EF1 is OFF   □ VERIFY Fan 9EF2 is OFF   □ VERIFY Fan 10XEF1 is OFF   □ VERIFY Fan 10XEF2 is OFF   □ VERIFY Fan 10XSF2 is CLOSE   □ VERIFY Vent 8AV0 is CLOSE   □ VERIFY Vent 8AV1 is CLOSE   □ VERIFY Vent 8AV2 is CLOSE   □ VERIFY Vent 8AV3 is CLOSE   □ VERIFY Vent 8AV4 is CLOSE   □ VERIFY Vent 9AV1 is CLOSE   □ VERIFY Vent 9AV2 is CLOSE		AFTER ~ 30 secs	
TURN Bypass Switch from Bypass  □ VERIFY Strobes □, Sonalerts □ and Fans (after ~30secs) □ CONTI  REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  □ VERIFY Fan 8EF0 is OFF □ VERIFY Fan 9EF1 is OFF □ VERIFY Fan 9EF1 is OFF □ VERIFY Fan 10XEF1 is OFF □ VERIFY Fan 10XEF1 is OFF □ VERIFY Fan 10XEF2 is OFF □ VERIFY Fan 10XEF2 is OFF □ VERIFY Fan 10XEF2 is CLOSE □ VERIFY Vent 8AV0 is CLOSE □ VERIFY Vent 8AV1 is CLOSE □ VERIFY Vent 8AV3 is CLOSE □ VERIFY Vent 8AV4 is CLOSE □ VERIFY Vent 9AV1 is CLOSE	g=-0-		
REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  □ VERIFY Fan 8EF0 is □ OFF □ VERIFY Fan 8EF1 is □ OFF □ VERIFY Fan 9EF1 is □ OFF □ VERIFY Fan 9EF2 is □ OFF □ VERIFY Fan 10XEF1 is □ OFF □ VERIFY Fan 10XEF1 is □ OFF □ VERIFY Fan 10XEF2 is □ OFF □ VERIFY Fan 10XEF2 is □ CLOSE □ VERIFY Fan 10XSF2 is □ CLOSE □ VERIFY Vent 8AV0 is □ CLOSE □ VERIFY Vent 8AV1 is □ CLOSE □ VERIFY Vent 8AV2 is □ CLOSE □ VERIFY Vent 8AV3 is □ CLOSE □ VERIFY Vent 8AV4 is □ CLOSE □ VERIFY Vent 8AV4 is □ CLOSE □ VERIFY Vent 9AV1 is □ CLOSE □ VERIFY Vent 9AV1 is □ CLOSE □ VERIFY Vent 9AV1 is □ CLOSE □ VERIFY Vent 9AV2 is □ CLOSE □ VERIFY Vent 9AV2 is □ CLOSE	STOP		
REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  VERIFY Fan 8EF0 is OFF VERIFY Fan 9EF1 is OFF VERIFY Fan 9EF1 is OFF VERIFY Fan 10XEF1 is OFF VERIFY Fan 10XEF1 is OFF VERIFY Fan 10XEF2 is OFF VERIFY Fan 10XEF2 is OFF VERIFY Fan 10XSF1 is CLOSE VERIFY Vent 8AV0 is CLOSE VERIFY Vent 8AV1 is CLOSE VERIFY Vent 8AV2 is CLOSE VERIFY Vent 8AV3 is CLOSE VERIFY Vent 8AV4 is CLOSE VERIFY Vent 9AV1 is CLOSE	CONTINUE		
REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2 REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB2  VERIFY Fan 8EF0 is OFF VERIFY Fan 8EF1 is OFF VERIFY Fan 9EF1 is OFF VERIFY Fan 10XEF1 is OFF VERIFY Fan 10XEF1 is OFF VERIFY Fan 10XEF1 is OFF VERIFY Fan 10XSF1 is CLOSE VERIFY Fan 10XSF2 is CLOSE VERIFY Vent 8AV0 is CLOSE VERIFY Vent 8AV1 is CLOSE VERIFY Vent 8AV3 is CLOSE VERIFY Vent 8AV4 is CLOSE VERIFY Vent 8AV4 is CLOSE VERIFY Vent 8AV4 is CLOSE VERIFY Vent 9AV1 is CLOSE VERIFY Vent 9AV2 is CLOSE	CONTINUE	J VERIF 1 Strodes □, Solialerts □ and Falls (after ~50secs) □	Ш
□ VERIFY         Fan 8EF1 is         OFF           □ VERIFY         Fan 9EF1 is         OFF           □ VERIFY         Fan 9EF2 is         OFF           □ VERIFY         Fan 10XEF1 is         OFF           □ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE		REMOVE Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB1 REMOVE Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB2	
□ VERIFY         Fan 9EF1 is         OFF           □ VERIFY         Fan 9EF2 is         OFF           □ VERIFY         Fan 10XEF1 is         OFF           □ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE		r r	
□ VERIFY         Fan 9EF2 is         OFF           □ VERIFY         Fan 10XEF1 is         OFF           □ VERIFY         Fan 10XEF2 is         OFF           □ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF		
□ VERIFY         Fan 10XEF1 is         OFF           □ VERIFY         Fan 10XEF2 is         OFF           □ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE		□ <b>VERIFY</b> Fan <b>8EF0</b> is	
□ VERIFY         Fan 10XEF2 is         OFF           □ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF	□ VERIFY Fan 8EF0 is □ VERIFY Fan 8EF1 is	
□ VERIFY         Fan 10XSF1 is         CLOSE           □ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF	□ VERIFY Fan 8EF0 is □ VERIFY Fan 8EF1 is □ VERIFY Fan 9EF1 is	
□ VERIFY         Fan 10XSF2 is         CLOSE           □ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF	☐ VERIFY Fan 8EF0 is ☐ VERIFY Fan 8EF1 is ☐ VERIFY Fan 9EF1 is ☐ VERIFY Fan 9EF2 is	
□ VERIFY         Vent 8AV0 is         CLOSE           □ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF	VERIFY       Fan 8EF0 is         VERIFY       Fan 8EF1 is         VERIFY       Fan 9EF1 is         VERIFY       Fan 9EF2 is         VERIFY       Fan 10XEF1 is         VERIFY       Fan 10XEF2 is	
□ VERIFY         Vent 8AV1 is         CLOSE           □ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF OFF CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF2 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is	
□ VERIFY         Vent 8AV2 is         CLOSE           □ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF OFF CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 8EF1 is VERIFY Fan 9EF1 is VERIFY Fan 9EF2 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF2 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF1 is	
□ VERIFY         Vent 8AV3 is         CLOSE           □ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 8EF1 is VERIFY Fan 9EF1 is VERIFY Fan 9EF2 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF2 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY VERIFY Vent 8AV0 is	
□ VERIFY         Vent 8AV4 is         CLOSE           □ VERIFY         Vent 9AV1 is         CLOSE           □ VERIFY         Vent 9AV2 is         CLOSE	OFF OFF OFF CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 8EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Fan 10XSF2 is VERIFY VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is	
<ul> <li>□ VERIFY Vent 9AV1 is</li> <li>□ VERIFY Vent 9AV2 is</li> <li>□ CLOSE</li> <li>□ CLOSE</li> </ul>	OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF2 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF2 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is	
☐ VERIFY Vent 9AV2 is CLOSE	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF2 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is VERIFY Vent 8AV3 is	
	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is VERIFY Vent 8AV3 is VERIFY Vent 8AV4 is	
U VEKIFY VEHI YAV 3 IS CLOSE	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is VERIFY Vent 8AV3 is VERIFY Vent 8AV4 is VERIFY Vent 9AV1 is	
UEDIEV Vent 04 V/4 in	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 9EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is VERIFY Vent 8AV3 is VERIFY Vent 8AV4 is VERIFY Vent 9AV1 is VERIFY Vent 9AV1 is VERIFY Vent 9AV1 is	
U VEKIFY VEHI 9A V4 18 CLOSE	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 8EF1 is VERIFY Fan 9EF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV3 is VERIFY Vent 8AV4 is VERIFY Vent 9AV1 is VERIFY Vent 9AV1 is VERIFY Vent 9AV1 is VERIFY Vent 9AV2 is VERIFY Vent 9AV2 is VERIFY Vent 9AV2 is VERIFY Vent 9AV3 is	
RESET ODH in MCR  □ VERIFY MCR sees ODH as RESET	OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED	VERIFY Fan 8EF0 is VERIFY Fan 8EF1 is VERIFY Fan 9EF1 is VERIFY Fan 9EF2 is VERIFY Fan 10XEF1 is VERIFY Fan 10XEF1 is VERIFY Fan 10XSF1 is VERIFY Fan 10XSF2 is VERIFY Vent 8AV0 is VERIFY Vent 8AV1 is VERIFY Vent 8AV2 is VERIFY Vent 8AV3 is VERIFY Vent 8AV4 is VERIFY Vent 9AV1 is VERIFY Vent 9AV1 is VERIFY Vent 9AV2 is VERIFY Vent 9AV2 is VERIFY Vent 9AV3 is	

<sup>☐</sup> Check for Test Acceptance of Activation of multiple sensors 10XAS1 and 10XAS2 in sector 10 Experimental area.

#### 1.14 10-minute Activation test of sensor 10AS1 in sector 10

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
JUMPER JUMPER	Tp2 and Tp4 on the Div A pcb in 10CB2 Tp2 and Tp4 on the Div B pcb in 10CB2	
VERIFY VERIFY VERIFY VERIFY VERIFY	MCR sees Peer 17 is in MCR sees 10AS1 Div A MCR sees 10AS1 Div B Fan 10EF1 is immediately Vent 10AV1 is immediately Vent 10AV2 is immediately	MODE 2 TRIPPED TRIPPED ON OPEN OPEN
AFTER	~ 30 secs	
TURN VERIFY TURN VERIFY	Bypass Switch to Bypass  Strobes   Sonalerts   and Fans (after ~90secs)   Bypass Switch from Bypass  Strobes   Sonalerts   and Fans (after ~30secs)	STOP CONTINUE
BEGIN	10-minute timer	
RECORD	<b>Volume of air-flow</b> at the inlet of fan <b>10EF1</b> Target flow value ( $\pm 10\%$ )	<b>LFM</b> 1592 LFM
VERIFY VERIFY	Air flow at tell-tale of vent 10AV1 is Air flow at tell-tale of vent 10AV2 is	ADEQUATE ADEQUATE
AFTER RECORD	~ 10 minutes Duration of timer	mins
VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Fan 11EF1 is Fan 11EF2 is Fan 12XEF1 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is Vent 11AV2 is Vent 11AV3 is	ON ON ON OPEN OPEN OPEN OPEN OPEN
REMOVE REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 10CB2 Jumper between Tp2 and Tp4 on the Div B pcb in 10CB2	
VERIFY VERIFY VERIFY VERIFY	Fan 10EF1 is Vent 10AV1 is Vent 10AV2 is Fan 11EF1 is	OFF CLOSED CLOSED OFF
VERIFY VERIFY	Fan 11EF2 is Fan 12XEF1 is	OFF OFF

	VERIFY VERIFY VERIFY VERIFY RESET VERIFY	Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is Vent 11AV2 is Vent 11AV3 is ODH in MCR MCR sees ODH as	CLOSED CLOSED CLOSED CLOSED CLOSED
	Chec	ck for Test Acceptance of sensor 10AS1 on for > 10 minutes	
1.15	Test Activation	on of multiple sensors 10AS2 and 10AS3 in sector 10	
	PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
	JUMPER JUMPER JUMPER JUMPER	Tp2 and Tp4 on the Div A pcb in 10CB3 Tp2 and Tp4 on the Div B pcb in 10CB3 Tp2 and Tp4 on the Div A pcb in 10CB5 Tp2 and Tp4 on the Div B pcb in 10CB5	
	VERIFY	MCR sees Peer 17 is in	MODE 2
	VERIFY	MCR sees 10AS2 Div A	TRIPPED
	VERIFY VERIFY	MCR sees 10AS2 Div B MCR sees 10AS3 Div A	TRIPPED TRIPPED
	VERIFY	MCR sees 10AS3 Div A MCR sees 10AS3 Div B	TRIPPED
	VERIFY	Fan <b>10EF1</b> is	ON
	VERIFY	Fan <b>11EF1</b> is	ON
	VERIFY	Fan 11EF2 is	ON
	VERIFY	Fan <b>12XEF1</b> is	ON
	VERIFY VERIFY	Vent 10AV1 is Vent 10AV2 is	OPEN OPEN
	VERIFY	Vent 10AV2 is Vent 10AV3 is	OPEN
	VERIFY	Vent 10AV4 is	OPEN
	VERIFY	Vent 11AV1 is	OPEN
	VERIFY	Vent 11AV2 is	OPEN
	VERIFY	Vent 11AV3 is	OPEN
	AFTER	~ 30 secs	
	TURN VERIFY	Bypass Switch to Bypass	STOP
	TURN	<b>Strobes</b> □, <b>Sonalerts</b> □ and <b>Fans</b> (after ~90secs) □ Bypass Switch <b>from</b> Bypass	SIOF
	VERIFY	Strobes □, Sonalerts □ and Fans (after ~30secs) □	CONTINUE
	REMOVE REMOVE REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 10CB3 Jumper between Tp2 and Tp4 on the Div B pcb in 10CB3 Jumper between Tp2 and Tp4 on the Div A pcb in 10CB5 Jumper between Tp2 and Tp4 on the Div B pcb in 10CB5	
	VERIFY VERIFY	Fan <b>10EF1</b> is Fan <b>11EF1</b> is	OFF OFF

	VERIFY	Fan <b>11EF2</b> is	OFF
	VERIFY	Fan 12XEF1 is	OFF
	<b>VERIFY</b>	Vent 10AV1 is	CLOSED
	<b>VERIFY</b>	Vent <b>10AV2</b> is	CLOSED
	VERIFY	Vent <b>10AV3</b> is	CLOSED
	VERIFY	Vent 10AV4 is	CLOSED
	VERIFY	Vent <b>11AV1</b> is	CLOSED
	VERIFY	Vent <b>11AV2</b> is	CLOSED
	VERIFY	Vent 11AV3 is	CLOSED
	RESET	ODH in MCR	
	VERIFY	MCR sees ODH as	RESET
	Check fo	or Test Acceptance of Activation of multiple sensors 10AS2 and 10AS3	3 in sector 10
1.16	Test Manual	fan ON/OFF controls in Alcove 9C	
	PLACE	Peer 17 in Mode 8	
	VERIFY	Peer 17 is in Restricted Access	MODE 8
	PRESS	Fan <b>ON</b> button in <b>Alcove 9C</b>	
	BEGIN	90-sec timer	
	VERIFY	Fan 9EF2 is	ON
	VERIFY	Vent 9AV1 is	OPEN
	VERIFY	Vent 9AV2 is	OPEN
	VERIFY	Vent 9AV3 is	OPEN
	VERIFY	Vent <b>9AV4</b> is	OPEN
	VERIFY	Air flow at tell-tale of vent 9AV3 is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent 9AV4 is	ADEQUATE
	PRESS	Fan <b>OFF</b> button in <b>Alcove 9C</b>	
	AFTER	90 secs from ON command	
	**********	E OFFIA:	0.77
	VERIFY	Fan 9EF2 is	OFF
	VERIFY	Vent 9AV1 is	CLOSED
	VERIFY	Vent 9AV2 is	CLOSED
	VERIFY	Vent 9AV3 is	CLOSED
	VERIFY	Vent <b>9AV4</b> is	CLOSED
	Choole fo	or Test Assentance of Manual for ON/OFF controls in Alcove OC	

		PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8	
		PRESS BEGIN	Fan <b>ON</b> button in <b>Experimental area fan control box 90-sec timer</b>		
		VERIFY	Fan <b>10XEF1</b> is	ON	
		VERIFY	Fan 10XEF2 is	ON	
		VERIFY	Fan <b>10XSF1</b> is	ON	
		VERIFY	Fan 10XSF2 is	ON	
		PRESS AFTER	Fan <b>OFF</b> button in <b>Experimental area fan control box 90 secs</b> from <b>ON</b> command		
		VERIFY	Fan 10XEF1 is	OFF	
		<b>VERIFY</b>	Fan <b>10XEF2</b> is	OFF	
		VERIFY	Fan 10XSF1 is	OFF	
		VERIFY	Fan 10XSF2 is	OFF	
		Check for	r Test Acceptance of Manual fan-ON/OFF controls in Exptl Area	of Sector 10	
1.18	,	Test Manual fa	an-ON/OFF controls in Alcove 11A		
		PLACE	Peer 17 in Mode 8		
		ILACE	Teel 17 in Mode o		
		VERIFY	Peer 17 is in Restricted Access	MODE 8	
				MODE 8	
		VERIFY PRESS	Peer 17 is in Restricted Access Fan ON button in Alcove 11A	MODE 8 ON	
		VERIFY PRESS BEGIN	Peer 17 is in Restricted Access Fan ON button in Alcove 11A 90-sec timer		
		VERIFY PRESS BEGIN VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is	ON	
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is	ON ON OPEN OPEN	
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is	ON ON OPEN	
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is	ON ON OPEN OPEN OPEN OPEN	
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is	ON ON OPEN OPEN OPEN	
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is	ON ON OPEN OPEN OPEN OPEN	I
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is	ON ON OPEN OPEN OPEN OPEN OPEN OPEN OPEN	I
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY PRECORD	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is  Volume of air-flow at the inlet of fan 11EF1  Target flow value (± 10%)	ON ON OPEN OPEN OPEN OPEN OPEN OPEN  2010 LFM 1592 LFM	I
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY	Peer 17 is in Restricted Access  Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is  Volume of air-flow at the inlet of fan 11EF1  Target flow value (± 10%) Air flow at tell-tale of vent 10AV3 is	ON ON OPEN OPEN OPEN OPEN OPEN OPEN  2010 LFM 1592 LFM ADEQUATE	l
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY RECORD VERIFY VERIFY PRESS AFTER	Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is  Volume of air-flow at the inlet of fan 11EF1  Target flow value (± 10%)  Air flow at tell-tale of vent 10AV3 is Air flow at tell-tale of vent 10AV4 is  Fan OFF button in Alcove 11A 90 secs from ON command	ON ON OPEN OPEN OPEN OPEN OPEN 2010 LFM 1592 LFM ADEQUATE ADEQUATE	I
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY PRESS AFTER	Fan ON button in Alcove 11A  90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is  Volume of air-flow at the inlet of fan 11EF1  Target flow value (± 10%)  Air flow at tell-tale of vent 10AV3 is Air flow at tell-tale of vent 10AV4 is  Fan OFF button in Alcove 11A  90 secs from ON command  Fan 10EF1 is	ON ON OPEN OPEN OPEN OPEN OPEN  2010 LFM 1592 LFM ADEQUATE ADEQUATE	1
		PRESS BEGIN VERIFY VERIFY VERIFY VERIFY VERIFY VERIFY RECORD VERIFY VERIFY PRESS AFTER	Fan ON button in Alcove 11A 90-sec timer  Fan 10EF1 is Fan 11EF1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is  Volume of air-flow at the inlet of fan 11EF1  Target flow value (± 10%)  Air flow at tell-tale of vent 10AV3 is Air flow at tell-tale of vent 10AV4 is  Fan OFF button in Alcove 11A 90 secs from ON command	ON ON OPEN OPEN OPEN OPEN OPEN 2010 LFM 1592 LFM ADEQUATE ADEQUATE	

Test Manual fan controls at Experimental area in sector 10

1.17

VERIFY VERIFY VERIFY VERIFY	Vent 10AV2 is Vent 10AV3 is Vent 10AV4 is Vent 11AV1 is r Test Acceptance of Manual fan-ON/OFF controls in Alcove 11A	CLOSED CLOSED CLOSED CLOSED
Test Manual f PLACE VERIFY PRESS BEGIN	Peer 17 in Mode 8 Peer 17 is in Restricted Access Fan ON button in Alcove 11B 90-sec timer	MODE 8

<b>VERIFY</b>	Vent 10AV1 is
<b>VERIFY</b>	Vent 10AV2 is
VERIFY	Vent 10AV3 is
<b>VERIFY</b>	Vent 10AV4 is
VERIFY	Vent 11AV1 is

Fan OFF button in Alcove 11B

90 secs from ON command

Fan 10EF1 is

Fan 11EF1 is

VERIFY	Fan <b>10EF1</b> is	OFF
<b>VERIFY</b>	Fan <b>11EF1</b> is	OFF
VERIFY	Vent 10AV1 is	CLOSED
VERIFY	Vent 10AV2 is	CLOSED
VERIFY	Vent 10AV3 is	CLOSED
<b>VERIFY</b>	Vent 10AV4 is	CLOSED
VERIFY	Vent 11AV1 is	CLOSED

☐ Check for Test Acceptance of Manual fan-ON/OFF controls in Alcove 11B

1.19

□ **VERIFY** 

□ **VERIFY** 

**PRESS** 

**AFTER** 

 $\mathbf{ON}$ 

ON

OPEN OPEN OPEN OPEN

#### 1.20 Test Manual fan OFF controls in MCR

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
PRESS PRESS PRESS	Fan <b>ON</b> button in <b>Alcove 9C</b> Fan <b>ON</b> button in <b>Experimental area fan control box</b> Fan <b>ON</b> button in <b>Alcove 11A</b>	
BEGIN	90-sec timer	
VERIFY	Fan 9EF2 is Fan 10EF1 is Fan 11EF1 is Fan 10XEF1 is Fan 10XEF2 is Fan 10XSF1 is Fan 10XSF2 is Vent 9AV1 is Vent 9AV2 is Vent 9AV3 is Vent 9AV4 is Vent 10AV1 is Vent 10AV1 is Vent 10AV1 is Vent 10AV3 is Vent 10AV4 is Vent 10AV4 is	ON ON ON ON ON ON OPEN OPEN OPEN OPEN OP
PRESS AFTER	Fan OFF button in MCR 90 secs from ON command	
VERIFY	Fan 9EF2 is Fan 10EF1 is Fan 11EF1 is Fan 10XEF1 is Fan 10XEF2 is Fan 10XSF1 is Fan 10XSF2 is Vent 9AV1 is Vent 9AV2 is Vent 9AV3 is Vent 9AV4 is Vent 10AV1 is Vent 10AV1 is Vent 10AV2 is Vent 10AV3 is Vent 10AV3 is Vent 10AV4 is Vent 10AV4 is	OFF OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED

 $\Box$  Check for Test Acceptance of Manual fan OFF controls in MCR

## 1.21 Test Manual fan-ON/OFF controls at gate 10GE1

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
PRESS BEGIN	Fan <b>ON</b> button at gate <b>10GE1 90-sec timer</b>	
VERIFY	Fan 9EF2 is Fan 10EF1 is Fan 11EF1 is Fan 10XEF1 is Fan 10XEF2 is Fan 10XSF1 is Fan 10XSF2 is Vent 9AV1 is Vent 9AV2 is Vent 9AV3 is Vent 9AV4 is Vent 10AV4 is Vent 10AV4 is	ON ON ON ON ON ON ON OPEN OPEN OPEN OPEN
VERIFY PRESS AFTER	Vent 11AV1 is  Fan OFF button at gate 10GE1 90 secs from ON command	OPEN
VERIFY	Fan 10EF1 is Fan 10EF1 is Fan 10XEF1 is Fan 10XEF2 is Fan 10XSF1 is Fan 10XSF2 is Vent 9AV1 is Vent 9AV2 is Vent 9AV3 is Vent 10AV1 is Vent 10AV1 is Vent 10AV1 is Vent 10AV3 is Vent 10AV3 is	OFF OFF OFF OFF OFF CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED CLOSED

☐ Check for Test Acceptance of Manual fan ON/OFF controls at gate 10GE1

## 1.22 Test MCR reset of Manual fan-ON/OFF controls at gate 10GE1

	PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
	PRESS BEGIN	Fan ON button at gate 10GE1 90-sec timer	
	VERIFY	Fan <b>9EF2</b> is	ON
	VERIFY	Fan <b>10EF1</b> is	ON
	VERIFY	Fan 11EF1 is	ON
	VERIFY	Fan <b>10XEF1</b> is	ON
	VERIFY	Fan <b>10XEF2</b> is	ON
	VERIFY	Fan <b>10XSF1</b> is Fan <b>10XSF2</b> is	ON ON
	VERIFY	Vent 9AV1 is	ON
	VERIFY VERIFY	Vent 9AV1 is Vent 9AV2 is	OPEN OPEN
	VERIFY	Vent 9AV3 is	OPEN
	VERIFY	Vent 9AV4 is	OPEN
	VERIFY	Vent 10AV1 is	OPEN
	VERIFY	Vent 10AV2 is	OPEN
	VERIFY	Vent 10AV3 is	OPEN
	VERIFY	Vent <b>10AV4</b> is	OPEN
	VERIFY	Vent 11AV1 is	OPEN
_			
	PRESS	Fan <b>OFF</b> button at <b>MCR</b>	
	AFTER	90 secs from ON command	
	VERIFY	Fan <b>9EF2</b> is	OFF
	<b>VERIFY</b>	Fan 10EF1 is	OFF
	<b>VERIFY</b>	Fan 11EF1 is	OFF
	<b>VERIFY</b>	Fan 10XEF1 is	OFF
	VERIFY	Fan <b>10XEF2</b> is	OFF
	VERIFY	Fan <b>10XSF1</b> is	OFF
	VERIFY	Fan <b>10XSF2</b> is	OFF
	VERIFY	Vent <b>9AV1</b> is	CLOSED
	VERIFY	Vent <b>9AV2</b> is	CLOSED
	VERIFY	Vent 9AV3 is	CLOSED
	VERIFY	Vent <b>9AV4</b> is	CLOSED
	VERIFY	Vent 10AV1 is	CLOSED
	VERIFY	Vent 10AV2 is	CLOSED
	VERIFY	Vent 10AV3 is	CLOSED
	VERIFY	Vent 10AV4 is	CLOSED
	VERIFY	Vent 11AV1 is	CLOSED

☐ Check for Test Acceptance MCR reset of Manual fan ON/OFF controls at gate 10GE1

## 1.23 Test of ODH sensor 10XAS3 in 10XCB3 at 1010B

PLACE VERIFY	Peer 17 in Mode 8 Peer 17 is in Restricted Access	MODE 8
FLOW RECORD RECORD VERIFY VERIFY VERIFY VERIFY VERIFY	Helium ( or Nitrogen ) gas across 10XAS3 Oxygen trip level for Div A Oxygen trip level for Div B MCR sees 10XAS3 Div A MCR sees 10XAS3 Div B Div A & B strobes on 10XCB3 are Div A & B sonalerts on 10XCB3 are Fans in 1010B are Vent 1010B is	TRIPPED TRIPPED FLASHING SOUNDING ON OPEN
HALT WAIT	Flow of gas on 10XAS3 For 10XAS3 to clear (level ~ trip-level above)	
VERIFY VERIFY VERIFY	Div A & B strobes and sonalerts on 10XCB1 are Fan in 1010B are Vent 1010B is	OFF OFF CLOSED
JUMPER JUMPER	Tp2 and Tp4 on the Div A pcb in 10XCB3 Tp2 and Tp4 on the Div B pcb in 10XCB3	
VERIFY VERIFY VERIFY VERIFY	Div A & B strobes on 10XCB3 are Div A & B sonalerts on 10XCB3 are Fans in 1010B are Vent 1010B is	FLASHING SOUNDING ON OPEN
TURN VERIFY TURN VERIFY	Bypass Switch to Bypass Strobes □ and Sonalerts □ Bypass Switch from Bypass Strobes □ and Sonalerts □	STOP CONTINUE
REMOVE REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 10XCB3 Jumper between Tp2 and Tp4 on the Div B pcb in 10XCB3	
VERIFY VERIFY VERIFY	Div A & B strobes and sonalerts on 10XCB1 are Fan in 1010B are Vent 1010B is	OFF OFF CLOSED
RESET VERIFY	ODH in MCR MCR sees ODH as	RESET

1.24	Summary of	air-flow at fan intakes and vents in sector 10	
	RECORD	Volume of air-flow at the inlet of fan 9EF2	LFM
		Target flow value ( $\pm 10\%$ )	<u>1592 LFM</u>
	RECORD	Volume of air-flow at the inlet of fan 10XEF1	LFM
		Target flow value ( $\pm 10\%$ )	<u>1488 LFM</u>
	RECORD	Volume of air-flow at the inlet of fan 10XEF2	LFM
		Target flow value ( $\pm 10\%$ )	<u>1488 LFM</u>
	RECORD	Volume of air-flow at the inlet of fan 10XSF1	LFM
		Target flow value ( $\pm 10\%$ )	<u>1416 LFM</u>
	RECORD	Volume of air-flow at the inlet of fan 10XSF2	LFM
		Target flow value ( $\pm 10\%$ )	<u>1416 LFM</u>
	RECORD	Volume of air-flow at the inlet of fan 10EF1	LFM
		Target flow value ( $\pm 10\%$ )	1592 LFM
	RECORD	Volume of air-flow at the inlet of fan 11EF1	LFM
		Target flow value ( $\pm 10\%$ )	<u>1592 LFM</u>
	VERIFY	Air flow at tell-tale of vent <b>9AV1</b> is	ADEQUATE
	<b>VERIFY</b>	Air flow at tell-tale of vent <b>9AV2</b> is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent <b>9AV3</b> is	<b>ADEQUATE</b>
	VERIFY	Air flow at tell-tale of vent <b>9AV4</b> is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent 10AV1 is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent <b>10AV2</b> is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent <b>10AV3</b> is	ADEQUATE
	VERIFY	Air flow at tell-tale of vent <b>10AV4</b> is	ADEQUATE
[	□ Check fo	or Acceptance of Summary of air-flow at fan intakes and vents in	sector 10
		END OF TEST PROCEDURE	
TTL: Sig	n for completi	on of initial testing:	
		Date:	<i>!!</i>
TTL: Sig	n for completi	on of final testing:	
		Date:	<i>!</i>